EVALUATION OF *Plasmodium cynomolgi* SPOROZOITES INDUCED INFECTIONS OF CAPTIVE BORN *Macaca Fasicularis*

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OBJECTIVE : To determine if the cynomolgus monkey can be used to supplement rhesus monkeys in the antimalarial radical curative test.

BACKGROUND : India has ceased exportation of rhesus monkeys which are used in the *Plasmodium cynomolgi* antimalarial compound testing model. The cynomolgus *(Macaca fasicularis)* is raised at AFRIMS and this species is more productive in a laboratory breeding colony than are rhesus monkeys. A symtematic evaluation of captive born has not been completed to determine if this species could be used to supplement scarce rhesus monkeys.

RESULTS : Twenty-five AFRIMS produced cynomolgus have been inoculated with *P. cynomolgi* sporozoites. The intact cynomolgus does not develop an infection comparable to the rhesus. The splenectomized captive-born cynomolgus monkey appears to be capable of supplementing rhesus in antimalarial compound testing. Relapse occurs (as in rhesus monkeys) after clearance of blood forms with chloroquine given alone or alone with a noncurative dose of primaquine or test compound.

FUTURE OBJECTIVES : To date only 7 splenectomized cynomolgus have had evaluation of relapse potential following clearance of blood forms. This number needs to be expanded to allow comparison with intact rhesus. The dose of sporozoites injected into splenectomized cynomolgus needs to be standardized so future test animals will be inoculated with the same dose as the rhesus in the antimalarial agent testing project.

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